

WHAT IS CLAIMED IS:

1. A wheel mounting sleeve comprising:

a sleeve body having an inner end and an outer end  
and formed and dimensioned for mounting through a wheel  
5 bearing bore in a wheel, said sleeve body further having  
an axially extending sleeve bore dimensioned for mounting  
in telescoped relation over an axle;

said sleeve body having at least one axle-engaging  
shoulder thereon retaining said sleeve on the axle and  
10 at least one wheel-engaging shoulder thereon retaining  
the wheel on said sleeve; and

said sleeve body includes a transversely extending  
end wall, and said sleeve bore extending axially into  
said end wall to provide an axle support bore segment  
15 in said end wall for support of transverse loads on the  
axle by said sleeve.

2. The wheel mounting sleeve as defined in claim 1  
wherein,

the axle support bore segment extends only partially  
20 into said end wall to provide a closed end extending  
across the end of the axle.

3. The wheel mounting sleeve as defined in claim 1  
wherein,

said axle support bore segment has a diameter less  
25 than a diameter of a remainder of said sleeve bore.

4. The wheel mounting sleeve as defined in claim 3 wherein,

an end of said remainder of said sleeve bore convergently tapers to the smaller diameter of said axle support bore segment.

5. The wheel mounting sleeve as defined in claim 1 wherein,

said sleeve bore slidably engages the axle;

said axle-engaging shoulder is provided on a resiliently outwardly displaceable finger positioned proximate said end wall; and

said axle support bore segment in said end wall slidably engages the end of the axle.

6. The wheel mounting sleeve as defined in claim 5 wherein,

said resiliently outwardly displaceable finger is cantilevered to extend axially along said sleeve body to a position proximate said end wall.

7. The wheel mounting sleeve as defined in claim 6 wherein,

said resiliently outwardly displaceable finger is cantilevered from said end wall.

8. The wheel mounting sleeve as defined in claim 6 wherein,

said resiliently outwardly displaceable finger is cantilevered from proximate a mid-length of said sleeve body and terminates short of said end wall.

5 9. The wheel mounting sleeve as defined in claim 5 wherein,

said resiliently outwardly displaceable finger is circumferentially cantilevered from said sleeve body proximate said end wall.

10 10. A wheel assembly comprising:  
an axle having a circumferentially extending notch proximate and inwardly of an outer end thereof;

a wheel having a central wheel bearing bore extending therethrough from an inner side to an outer side of said wheel;

15 a wheel mounting sleeve having a sleeve body formed with a sleeve bore dimensioned for, and slidably mounted over, said axle; said sleeve body having an outer diameter formed for, and slidably inserted into, said wheel bearing bore; said sleeve body further being formed  
20 with at least one axle-engaging shoulder thereon retaining said sleeve on said axle and at least one wheel-engaging shoulder thereon retaining said wheel on said sleeve; and

25 said sleeve body further including a transversely extending end wall, and an axle stabilizing recess in said end wall axially aligned with said sleeve bore and receiving said outer end of said axle, said axle

stabilizing recess being dimensioned to support transverse loads on said axle.

11. The wheel assembly as defined in claim 10 wherein,  
said axle has an axle stub at said outer end having  
5 a diameter less than a diameter of said axle on both  
sides of said notch, said axle stub being slidably  
received in said axle stabilizing recess in said end  
wall.
12. The wheel assembly as defined in claim 11 wherein,  
10 said axle convergently tapers from a diameter  
proximate said notch to the smaller diameter of said axle  
stub.
13. The wheel assembly as defined in claim 12 wherein,  
said sleeve body convergently tapers to mate with  
15 the convergent taper of said axle.
14. The wheel assembly as defined in claim 10 wherein,  
said sleeve bore slidably engages said axle;  
said axle-engaging shoulder is provided on a  
resiliently outwardly displaceable finger positioned  
20 proximate said end wall; and  
said axle stabilizing recess in said end wall  
slidably engages said outer end of said axle.
15. The wheel assembly as defined in claim 14 wherein,

said resiliently outwardly displaceable finger is cantilevered to extend axially along said sleeve body to a position proximate said end wall.

16. The wheel assembly as defined in claim 15 wherein,  
5        said resiliently outwardly displaceable finger is cantilevered from said end wall.

17. The wheel assembly as defined in claim 15 wherein,  
      said resiliently outwardly displaceable finger is cantilevered from proximate a mid-length of said sleeve  
10    body and terminates short of said end wall.

18. The wheel mounting sleeve as defined in claim 14 wherein,  
      said resiliently outwardly displaceable finger is circumferentially cantilevered from said sleeve body  
15    proximate said end wall.